

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: "Fishpool, Tony" <TONYF@mlcse1.agw.bt.co.uk>
Subject: [1829] 2SC799
Message-ID: <300CDEF1@longate.agw.bt.co.uk>

Hi guys, I can't add much to the data that has already been posted about the 2SC799 other than the pinout which according to a database I picked up at a ham rally says the following:-

(Viewed from bottom)

```

  E  B  C
    /---\
    |    |
    |    |
tab/\___/

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The downside of this software is that it's in dutch (I think!) but good value for a pound. (even better value if you read dutch). Its called Torbase and I assume it's P.D. or shareware, anyone know the dutch word for shareware?

72's
Tony - G4WIF
G-QRP 2324
tonyf@mlsce1.agw.bt.co.uk

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: nwqrp@scn.org (SCN User)
Subject: [1828] HANDS TX1
Message-ID: <199507190635.XAA01664@scn.org>

QRP-L gang,

I am interested in building the HANDS TX1 transmitter (80m version). It sounds like a good companion tx for the Traveller 80m rx (ssb/cw).

Has anyone here built the TX1? What experience did you have with it? Did everything go okay? How does it work? Any problems?

I don't really need the companion tx to have ssb, but if I did, the T2 looks like another good option. Has anyone built this one? Have you got it running on SSB? Was it easy to do?

Thanks in advance!

--Brian, KV9X

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*                               NorthWest QRP Club                ----- *
*                               nwqrp@scn.org                    --0---/\-- *
*   http://www.scn.org/scripts/menus/n/nwqrp/nwqrp.menu         /^\^\/ ^^\ *

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From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: JessQRP@aol.com
Subject: [1843] I "blew it" again!
Message-ID: <950719135923_118305509@aol.com>

Hi Dave,

Now for the latest update. I found that I had an electrolytic cap in backwards. Not sure which one exactly, but it is the 47uf 16v near the 220 uf right next to VR and the 10 ohm resistor. Anyway, I hooked the rig up to 13.8 and found that the power out would get to about 1.2 watts, but then the side tone got way loud like it wasn't muting. I grounded the RX key line and smelled something hot, then the rig would not stop keying. I repalced the JFET for the audio mute, and found that that cap was in backwards and blown. I repalced the cap and then found that the rig would still not stop keying. Further investigation found that Q3 the 3906 switch for the TX key line was blown again. I replaced it and found that the two bias resistors that are near the transistor that stand up on end were touching. Bent those out of the way and then VIOLA, the rig was working again. Hooked it up and got about 1 watt at 12 volts and 1.2 at 13.8. I figured that by this time I had had enough with fooling around with it. I buttoned it up and was thinking about adding in a fuse holder, radial DC plug, and on off switch, and some other odds and ends to hook it up. I don't like running the rigs without a fuse. I had not installed a fuse in this one yet as I felt it still wasn't finished. Well at about the same time that I had the SWL 30 peking on the bench (I had just gotten a 459 from an XJ6 on the half square!), when 5a1a came on the air on 80 meters. I had just finished working on the 80 meter inverted L and though, what the hay, give him a try at QRO levels, I am not that hardcore! Well, to make a long story short, about the time that I got the 80 meter antenna tuned at 25 watts, I smelled smoke, and then heard DRRRRRIIIIIIIITTTTTTTTTTTTTDITDITDITDIT ZAP! Looked over and the SWL 30 NON FUSED!!!! power cord was smoking...As was the rig. I unplugged the cord and opened it up. The 33 v zener at the output of rf was cratered. The 80 meter antenna is too close to the 30 meter half square. RF feeding into the 30

meter antenna from the 80 meter antenna and diode soup!

Now for the question, what are the chances of most of the rig surviving? I have not had the guts to replace the zener and see what else is cooked. Bearing in mind that the power cord got so hot that it melted partially but was unplugged quickly.....

Think that there is any hope???? I think that this rig must have a personal vendetta against me...I have never had this much "fun" with any of my other rigs...

I suppose that I could always salvage the chassis for my not as pretty but still keeps working SWL 40 in the Ratty Shack Box.....:-(

Jess NOTFI

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [1848] PCB layout
Message-ID: <199507191851.NAA13321@chuck.dallas.sgi.com>

Gang,

I got everything together finally (well for this week anyway) the way I want it.

I have an old Amdek DXY-100 flatbed plotter. The neat thing about this old clunker (actually it looks like it just came outta the box and it works great) is that it uses a pen holder with screw that holds just about any felt-tip pen with normal size barrel.

I'm in the process of creating my first PC board by using the plotter to lay down the pattern and then etching it to see what type of off-the-shelf pen will give me the best traces, etc. I'll write this up for QQ and have a photo of the results. Should be done by Sunday, what with work and all. I started this once and got interrupted, but not this time.

I'm doing this to layout the PC work for the keyer that I had talked about on and off and some people think that I didn't finish it. :-)) I just think that with the current drain and no EEROM or memory save feature other than the EPROM it won't be of much use to the majority of the QRP crowd. But, I'll put the artwork, schematics, and code on the ftp.Lehigh.edu site for those interested.

I will not be doing boards gang. It ain't worth it considering the time involved. I sincerely believe the \$58 for the CMOS Super Morse 3 keyer is well worth the price and the savings in overhead, but I'll let you be the judge of that.

I am also working on a board layout for doing the following and I will share this with the rest of the world also, just remember where you heard it first. I had been studying the problem on and off for the past year on just how the typical ham (well, maybe someone a little up the learning curve and with a good supply or source of parts) could come up with test equipment to check out receivers. The ARRL and others use labs with 10's of thousands of dollars of test equipment to run performance measurements. What I want is a set of tools that will help me get a hold on just how well brand-x compares with brand-y. At least a reproducible benchmark for my own benefit and hopefully for the benefit of others.

It is also timely that the question of weak signal reception came up too. Consider the following, which is what I'm striving for.

1. Signal source with calibrated or accurate output level(s)
2. Variable attenuator to 100 dB level

With the above I want to be able to check the sensitivity level of all my rigs with only internal noise and no antenna connected other than 50 ohm dummy load and sensitivity level with antenna connected and no other signal but that from the above signal source. Looking for the noise floor and its effect on discernable signal levels.

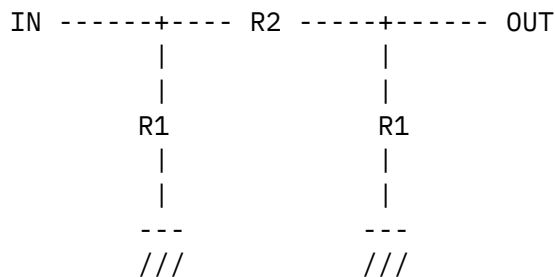
I also want to be able to also detect what I can personally copy at various speeds and various filters. This again in light of Wayne's postings and followups, and the latest article in Scientific American.

So to this purpose I am laying out a single board with signal source and attenuator. Using the guidelines in the ARRL handbooks before 1995. For some reason the 1995 handbook eliminated some of the discussion on measuring receiver performance, at least as far as I've searched through the index.

In fact, now that I'm working through the numbers on page 25-39 in Table 4 for the Pi-Network Resistive Attenuator (50 ohm) I can understand why they took the table(s) out. They look wrong to me and I've done the calculations using Spice2g6 and a TI-30X calculator. These tables have been around since 1982. Surely if there was an error someone else would have caught them by now. I'm sure I made a mistake somewhere and/or the circuits take into account cascading

as in the circuit on page 25-37. Ooops in 1993 ARRL Handbook - mileage may vary. I'll get out Orr's book and the RSGB Handbook later. I'll do the interaction calculations also, i.e. when you add another stage of attenuation it changes the impedance and the attenuation factor. You just need to know by how much and what the actual value is. It's relatively simple arithmetic but time consuming, but that's what we have computers for.

I'll let someone check me out. Thus far for example:



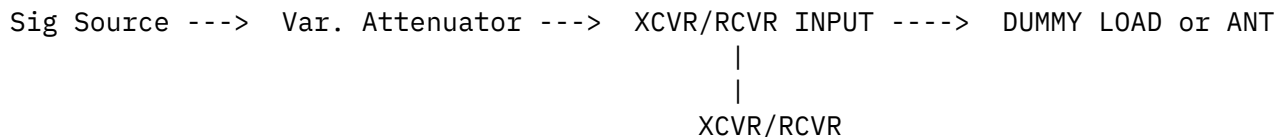
R1	R2	X(in) [ohms]	dB de ARRL Handbook	dB de Adams
68.0	270.0	56.61	-20.0	-13.93

a better configuration would be

56.0	470.0	50.61		-19.46
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I know that WA8MCQ has done a lot of work on attenuators and swears by them (or at them sometimes) and I'm just checking out what they'll do for me. This will work. It's just getting down to less than 5% errors on everything.

So when all this comes together I'll have the following:



Any one been there and done that? I want noise floor figures like 140dBm or whatever.

Ten Tec quoted figures in previous reviews:

Argonaut II -135 dBm
 Argosy -133 dBm
 Century 22 -128 dBm

Corsair	-131 dBm
Corsair 2	-124 dBm
Delta II	-129 dBm
Omni D	-128 dBm
Omni V	-135 dBm
Paragon	-137 dBm

Kenwood	
TS-850S	-141 dBm
TS-930	-139 dBm
TS-940	-139 dBm
TS-950	-142 dBm

The latter figures illustrate to me why a lot of the rigs that I talk to while QRP are Kenwood. One: they are popular and Two: they have good sensitive receivers.

Don't expect to get those kinds of numbers from cheap kits. The only kit that I have that has that kind of sensitivity in the receiver is the MXM xcvr and it has a dual conversion receiver. Some people have measured it at -140 dBm, but I haven't seen 'em put it in writing yet. Time will tell.

Stay tuned and let the flames begin.

dit dit

--

Chuck Adams K5FO CP-60 adams@sgi.com

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: Chris Gearhart <73370.1677@compuserve.com>
Subject: [1824] Pixie 2 freq. shift
Message-ID: <950719003107_73370.1677_FHR67-6@CompuServe.COM>

Many thanks to Monte (KU7Y), Stuart (K5KVH), Glen (VERDNL), Dave (AAPOL), and Geoff (NQ7A) for their speedy response to my question. I'll try using the 'ol 50 pf capacitor trick to shimmy that freq up a bit. Now for my next question: I'm building a portable dipole for 40m using #22 wire...do I need a 1:1 balun at the feed point (of the antenna) if I'm using RG 174 as the feedline?

Thanks,
Chris, N1HWQ

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: rarland@epix.net
Subject: [1856] QRP Vol-III Orders
Message-ID: <Pine.SUN.3.91.950719171230.15714F-100000@grape.epix.net>

Todate I have received 21 orders for Vol-III. These are being processed, and am awaiting the arrival of the books from the publisher (actually, they shud have been here a couple of days ago). Once they arrive, these orders will be on the way. I will post the names and/or calls of those who will be receiving books, so you will know to expect them.

I have talked to Tiare Publications and have doubled the original order, so there are plenty of books available for anyone who thought that they might not make it onto the original list of 50.

The entire set (Vol-I thru III) is available at a special discount price of \$40 plus \$4 for Priority Mailing (2 day guarenteed delivery) anywhere in the CONUS.

Vol-III is \$13.50 including 3rd class postage.

If you are still interested in obtaining copies please send your check or MO for the appropriate amount to:

Rich Arland
PO Box 1782
Shavertown, PA 18708

Tnx to all who have ordered. Your books will be shipped on or before Monday, next.

73 rich

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: "evans ken" <evans.ken@wgs-2.bwi.bls.com>
Subject: [1849] QRP= Microphone
Message-ID: <n1405953661.40112@wgs-2.bwi.bls.com>

I am still waiting for the microphone for my + from Index. I'll be camping on the North Carolina shore for the next week and will take the QRP+ along. I'd like to do some SSB work. Can anybody recommend a mic that would drive it

well??

Ken KJ4XR
evans.ken@bwi.bls.com

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: rarland@epix.net
Subject: [1857] QST QRP ARTicle
Message-ID: <Pine.SUN.3.91.950719171859.15714G-100000@grape.epix.net>

Just talked to the good folks at League HQ today. My story on "Hard Core QRP" will be in the September issue of QST. This article deals with milli and microwating on the HF bands and details the assult on the 40 meter M/W record done by Paul Stroud, AA4XX and Fran Slavinski, KA3WTF.

(now if I could only get my own talk show!!).
73 rich

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: eighmy@scott.net
Subject: [1860] Ring Diode DB Mixer voltage?
Message-ID: <199507192214.RAA20463@koala.scott.net>

Hello,

I hope this isn't a dumb question but I have a feeling it is.....:-)
According to all the literature I have read about diode ring mixers such as the ones used in the W7EL Optimized xcver and the Hayward's Ugly Weekender II, the LO voltage should be greater than 1 volt p-p (but more is better for IDM). Designs for these rigs claim about 2.5 v p-p.

My question is at what point do I measure that voltage? Is it accross the DBM primary or do I include the 50 ohm resistor as part of the LO input of the DBM? Forgive my ASCIIwork....

```

                Va=2.5vpp                Vb=1vpp
                ----- 50ohm -----
                (_ VVVVVV _)
Secondary of  (_                _) Primary of
DBM
VFO buffer   (_                _)
                (_                _)
```




The VFO is a Hartley patterned after W7EL's Optimized Xcver VFO but oscillates at 10.1 MHz. The buffer is identical.

Measurements :

Va to gnd = 2.5 volts p-p

Vb to gnd = 1 volt p-p

Va-Vb = 1.5 volts p-p (proving Kirchoff's Law ;-)

When I increase the output voltage of the VFO buffer to 5 vp-p, the voltage across the DBM primary (Vb to gnd) remains at 1 vp-p and the voltage across the resistor increases to 4 volts. Should I include the voltage across the 50 ohm resistor? Do I have the 2.5 vp-p requirement for the DBM? Is it the current that's important in the DBM primary?

Any help would be appreciated.

73/72,

Gene

wd4mps@scott.net

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995

From: JessQRP@aol.com

Subject: [1846] Rockloop Drawing.

Message-ID: <950719142637_118325317@aol.com>

I am getting ready to take off for a few days on vacation. I will make an effort when I get back to put together the drawing of the rock loop including the proposed method for framing the antenna. Someone had mentioned that the light bulb would rob power from the antenna. Very correct. I plan on putting a switch on the bulb in the box to disconnect it from the antenna when not tuning.

72/73 and listen for me railroad mobil 10106 and 7040 Thursday and Friday nights 21:00-23:00 MDT from Antinito Colorado. Will be using the A&A on 30 at 5 watts and the NN1G SWL 40 at 1.5 watts on 40 using center fed dipoles hung from whatever I can find!

72 and Choo Choo!!

Jess

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: "michael (w.m.) babineau" <babineau@bnr.ca>
Subject: [1844] Source for 17m Beacon List
Message-ID: <"17193 Wed Jul 19 12:58:21 1995"@bnr.ca>

Hi :

Does anyone know where I might find a list of beacon stations on 17m.
I understand that they tend to congregate around 18.1 Mhz.

I'm looking forward to getting on 17m with my newly purchased Mizuho HT.

Michael
VE3WMB

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: rarland@epix.net
Subject: [1858] SPRAT Back Issues.
Message-ID: <Pine.SUN.3.91.950719172135.15714H-1000000@grape.epix.net>

I have been going thru my library of STUFF and saw that I was missing
some issues of SPRAT.

Does anyone have issues #77 to present that they would be willing to
sell, trade or swap?

I have the following back issues of SPRAT for trade:
#66, #72, #73, & #74. All in excellent condition.

I am only missing one more issue, #23....I don't suppose that anyone has
a spare one floating around (yeah, right!)

73 rich

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: MSADAMS@ubvms.cc.buffalo.edu
Subject: [1842] Subscription?

Message-ID: <Pine.3.89.9507191328.A539511933-0100000@ubvms.cc.buffalo.edu>

Thanks to all who gave me info on subscribing at the listserv address, but it has not replied yet. How long should it take? More than one day?

Secondly, if anyone else owns an MFJ 9420 SSB rig please give me a shout. I would like to know what you think of it.

Thanks.

72- Mark, N2VPK

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [1853] Tail of Woe
Message-ID: <199507192034.PAA13614@chuck.dallas.sgi.com>

I gave Jess a 9.5, but I'm a little more sympathetic than Dave. :-) ;-)
Been there and done that.

I had sent Jess earlier mail congratulating him on his courage to post to this group. If anyone plays around and experiments long enough you are bound to toast something. It is part of the experience and allocate yourself a little extra in your ham budget to cover such occurrences. I try to keep a stock of parts that are most subject to failure and risk during the normal day-to-day operation and experimentation.

I lost the SWR circuit in my MFJ 941C while it was on the 40M long wire. Looks like I get to keep the wire, just sold off the land under it so I took it down. Some people just don't want that stuff. :-) The wire had been up 5 years and it was the multistranded copper wire. Fairly well oxidized so it goes to the dump. The ladder line was under the eave of the house so it was pretty much sheltered and is in excellent shape. It goes up with the next antenna. So out come the diodes (we buy those like 20 for a dollar or whatever at Dayton and hamfests) to see if that fixes the problem.

Dave was very nice to send Jess a new Zener. Such treatment of customers will keep me and others coming back. Good show Dave.

So Dave may be more sympathetic than I.....

dit dit

--

Chuck Adams K5FO CP-60 adams@sgi.com

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: "James P. Rybak" <jrybak@mesa5.Mesa.Colorado.EDU>
Subject: [1834] Transistors with BC Prefix
Message-ID: <Pine.3.89.9507190832.A23895-01000000@mesa5.mesa.colorado.edu>

Can anyone tell me who in the U.S. distributes transistors with a BC prefix. Specifically, I want to obtain the BC109 and BC477 transistors. Just out of curiosity, who is the manufacturer?

Thanks for any help you can provide.

Jim Rybak W0KSD

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: gaponoff@halcyon.com (Mark Gaponoff)
Subject: [1839] Wanted, testimonials for NE QRP Small Wonder Kit
Message-ID: <v01510100ac32e358be1a@[204.29.16.112]>

I am currently looking at jumping into a 30 meter rig--the NE QRP Small Wonder Kit is the current front runner in my shopping list. Do you know of a better "bang-for-the-buck" rig for 30 meters? (To me, "bang-for-the-buck" includes receiver performance.) My "main rig" doesn't do WARC.

I would also like to know if there is a library of mods for this rig? I am brand new to this mailing list, so I don't know about older postings. I will try to grope through the archives, also.

Thanks for your help, and 73's,

--Mark

-- Mark Gaponoff (gaponoff@halcyon.com). 73's de KJ7EM.
"K.I.C.K." (Keep It Complex, Kiddo...)

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: Electronic Design Magazine <dmalinak@CLASS.ORG>
Subject: [1855] Wilderness Radio NC40a arrives...
Message-ID: <Pine.SUN.3.91.950719140645.14146A-1000000@class.class.org>

To all: For those waiting on a Wilderness Radio NorCal 40a, your wait should be very short (like today or tomorrow). My kit arrived today. Great surprise! I had never seen the NorCal kits and I am very impressed with the manual/instruction booklet. Looks like even I can build this one.

Just thought I'd pass the good news along to those in wait.

72/73 David N2SMH
Glen Rock NJ

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: brian.carling@acenet.com (Brian Carling)
Subject: [1830] XT2BR
Message-ID: <2a6.36242.500@acenet.com>

Can anyone help with a QSL route?
I am STILL trying to get a QSL from XT2BR for a contact made in 1984
Details:
AF4K worked XT2BR on 5 January, 1984 at 2320 UTC on 14 MHz SSB.
No QSL route found so far, and all cards sent via bureau were returned.

If you know some other Nesgroup or echo that might have the answer, please forward this message.

Reply to Radio AF4K
From: brian.carling@acenet.com

SLMR 2.1a I hate this d40b n4036c2 2ey!

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: "Diana, Gary M" <gmd@rfpo1.rfc.comm.harris.com>
Subject: [1851] YAFFOTA!
Message-ID: <300D6A8C@smtpgate.rfc.comm.harris.com>

YAFFOTA! - Yet Another Forty-Forty On The Air!

I ordered the kit a year ago and only got it half done. The idea was that

I would build it along with a friend who wanted to get into building his own low power radio equipment.

I dug the kit out a couple weeks ago and finished populating the board. The mistake I made was to finish the job while at my parent's camp (nice lake to look at), worked on it at night (poor lighting), and maybe I should have tried soda instead of an 807! The bottom line: the dang thing didn't work when I powered it up!

First problem: oscillator frequency was below 3Mhz.

Solution: remove one turn from the coil in the osc circuit.

Second problem: poor/intermittent sensistivity.

Solution: cold solder joint detected and re-done.

Final problem: low audio, even with external audio amp.

Solution: remove 10k resistor, and install 10 ohm resistor, per schematic!

This little transceiver works very well. Sensitivity is excellent. By my scientific analysis (and 12" alligator clip antennna), this thing hears signals,

even in the basement! It has an RF gain control, which is usually turned down to the minimum position. Selectivity is also excellent. As advertised,

it covers about 40khz of the 40m band. I also installed the optional RIT circuit and it works like a charm. I made a few contacts, then just put the board and off board components in the aluminum chassis that is to be it's final resting place. I do this to check any effects the enclosure

may have on the circuit, before painting and lettering the enclosure.

The rig puts out a whopping 1.5 watts.

I used the rig last night just after a big lightning/thunderstorm went through

Rochester. Made 3 contacts, one after the other with 599 to 539 signal reports, into Canada and NJ. I was using my multiband trap vertical, and it's only at 15' and has a mere 4 radials. Not optimal by any means.

Any way, I wanted to share my experience and enthusiasm for this nice kit. I believe they can still be purchased through Small Wonder Labs (SWL), which I have no relation to, other than being a satisfied customer.

73, Gary N2JGU

gmd@rfc.comm.harris.com

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: cebik@UTKVX.UTCC.UTK.EDU
Subject: [1826] Re: 10 Meter QRP
Message-ID: <Pine.PMDF.3.91.950718213618.547358499A-100000@utkvx.utk.edu>

On Tue, 18 Jul 1995, Bob Cutter wrote:

> I do not know how one joins 10-10, ten member Q's I think. You might bring
> us all up to date with rules and addresses.
> 72, Bob KI0G

Bob,

Glad to oblige. To join 10-10, contact 10 10-10 members on 10 meters, recording their 10-10 #, call sign, name, Date of contact, city, state or country (if not US). Send the list (with QSOs listed in order of 10-10 #s and with a certification that your amateur radio license gives you 10 meter operating privileges) to an "area manager." ["0" area manager is simply Ten-Ten Int, 643 N. 98th St., #142, Omaha, NE 68114-2332.] Dues are \$10, for which you receive 4 issues of 10-10 News and are eligible to work toward any of the 10-10 awards and participate for score in 10-10 quarterly contests. If you chase paper, many chapters of 10-10 (over 100 chapters--may be one in your area) offer certificates with various upgrades to keep you swapping points and lists. Others collect 10-10 #s, with some having worked over 10,000 of the 60,000+ 10-10 numbers issued over the years. Every other year (next will be 1997) 10-10 holds a national convention.

I'll be glad to post the addresses of other area managers to the list, if anyone lets me know they need one.

This information is not intended to divert qrp-1 from its main purpose, but to answer a request for info that the requester thought might be of larger than individual interest.

-73-
LB, W4RNL

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: "rohre" <rohre@arlut.utexas.edu>
Subject: [1841] RE: 40M to balun or NOT
Message-ID: <n1405966032.67560@msmailgw1.arlut.utexas.edu>

As a long time user and proponent of dipoles; more often for 80 and 40 I have

NOT used a balun at the center of the dipole. If you are able to drop the coax away from the dipole at a right angle, there will be minimal effect to your pattern from not using the balun at these low frequencies. For QRP since any added network or mechanical connection could add losses, that is another reason to go the simple route. If you read the handbooks, most say that the Balun is optional at low frequency. If it makes you feel better, coil up about 6 turns of the coax at the center and hold it in a coil with nylon ties. That will choke RF from flowing back down over the outside of the coax shield. By the time the signal propagates out and away from your dipole, and goes thru all the twists and turns of reflections from skip, whether you had a balun will bear little on your results. At QRP levels, it is not likely even a little RF on your outside coax shield is going to cause any interference problems. Only if you seem to have developed RF in the shack complaints, or something, would the investment be warranted, and then only after trying simple tricks like extending the feed coax by say 10 more feet, or the coil of Coax at the center, or even a clamp around ferrite or two. The combination center insulator balun is a convenient center insulator, but adds too much weight in the case of the wire size you have chosen. The commercial ones are sized and weigh such that use of no. 14 stranded wire or larger is needed.

--Stuart K5KVH

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: dfjenki@ibm.net (David F. Jenkins)
Subject: [1823] Re: Diamonds and rust
Message-ID: <be43maNLbTVK079yn@ibm.net>

Chuck Adams' message re the ability of one to make sense of a signal in the presence of noise reminded me of both an NPR news bit they did a few months ago, and a recent article by Moss & Wiesenfeld in the August Scientific American on just that issue. (I believe it was one of those authors who was interviewed on the radio program.)

The most recent issue of Scientific American has an article on "Stochastic Resonance", which is the result of the apparent amplification of weak signals in the presence of random background fluctuations. It's a good article. NPR, a few months ago, had a news bit on stochastic resonance, and the demo they played over the air was truly astounding. The researcher played an "inaudible" tone, but when background hiss volume was increased, all of a sudden the tone became audible. As the noise volume was increased further to some threshold, of course, the tone became inaudible again.

The Amateur Scientist column in this issue describes an

experimental device that can be easily built to demonstrate the utility of noise in bringing out a signal. The article includes a parts list a schematic for a noise module, a signal module, and a threshold detector. The instrument emits a signal only in the presence of an input of sufficient intensity.

Anyway, Chuck's wider filter theory sounds to my untrained ear like an application of the principles discussed in the article.

I'd be interested in hearing if any of you examine CW signal recognition in the presence of noise comprised of other CW signals as well as truly random noise. Are there significant differences between the resonance effects for the two types of noise? What kind of differences?

David F. Jenkins
KK5KX

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: Bensondj@aol.com
Subject: [1850] Re: I "blew it" again!
Message-ID: <950719161047_36247442@aol.com>

Jess-

The scores are now in- the judges have awarded you a 9.2 in the "tale-of-woe" event! ;-)

Start by snipping out the zener- needless to say- it's toast. You may then try running the rig without that part, although you want to ensure the antenna is connected if you're transmitting (good practice in any case). The zener is intended as a fail-safe device for the PA and doesn't affect normal operation significantly. I'm a bit surprised that the 80M setup would take out the zener.

Let me know how you make out- I'll send another zener as soon as I get back from travel.

72/73 - Dave, NN1G

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: GREGOIRE@VALLEY.NET (ERNEST GREGOIRE)

packet : AA1IK@WA1WOK.FN43FE.NH.USA

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: GREGOIRE@VALLEY.NET (ERNEST GREGOIRE)
Subject: [1847] Re: Is this the right place?
Message-ID: <199507191827.0AA07820@dartvax.dartmouth.edu>

>
>RE. TT Omni VI.
>You would appear to know the straight goods on this.
>How do the Omni V, VI and the previous incarnation which I think is the
>Paragon XXX (don't remember exact model #) compare?
>
>
>Brien
>VE3VAW
>Toronto
>
>pepperb@gov.on.ca

Hello Brien,

I can't advise you about those models, having had no personal experience with them. I know of one other ham in Keene NH. that swears by his Argo. I get the feeling that some folks will always be Ford or Chevy men, as hams will be Kenwood or Icom men. So unless one of the big compaies put out a real piece of crap, then it is any mans opinion on which is better. I think Ten Tec is an honest, American, company that stands behind it's stuff. (Im not implying that the Japanese companies won't). But Ten Tec is American, that is important to me. With this trade war in the wind, I think that it is an important factor to consider if I'm going to spend \$2700.00 on a radio.

de AA1IK	(Lead by example, It is much easier)
	(to pull a string than it is to push it.)
Ernie Gregoire	()
Canaan, NH.	()
	(_____)

e-mail : GREGOIRE@VALLEY.NET
packet : AA1IK@WA1WOK.FN43FE.NH.USA

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: GREGOIRE@VALLEY.NET (ERNEST GREGOIRE)
Subject: [1852] Re: Is this the right place?
Message-ID: <199507192032.QAA23290@dartvax.dartmouth.edu>

<SNIP>>

>4. Don't you just love people who ask questions about a rig that you
>know they aren't going to buy 'cause they haven't even begun to collect
>the money? Wouldn't you like to just tell 'em to buzz off and save their
>questions for the Hamvention? Or have you learned to live with these
>sort of people? Still, they are annoying, aren't they? Makes you wonder
>what goes on inside their heads, doesn't it?

>

>73

>Nils

>WB8IJJ &c

>

Hello Nils,

:) :) :)

I got a big chuckle from your note. I suggest you do what I did a while back, that is to call TenTec and chat with them about the rigs in question. I am satisfied that the Omni VI is a top of the line rig, and it is suited to my needs. The rig is not a general coverage rig. That is how they get that low noise floor. It's not for every one.

I particularly enjoy weak signal work. I like to be the guy that looks for dx myself, works him, then post the dx on the packet cluster, and then listens to the pile up that will soon ensue. When I fish, I fly fish, I would rather make one contact on my 1 watt 40/40 to a dx station than blast a pileup with 1.5 kw signal and get him first try. The point here is this; there are different strokes for different folks.

I'm not agruing which is better for all, I simply have my preferences.

That's what make this such a great hobby (from a guy that says " Ham radio is not a matter of life and death, it's more important than that"),there is something for everyone.

So don't let the PT0, on your 3 point hitch over head cam, turbo, quasi random, oversampled, resonated, double conversion simi quad, rig throw you for a loop. The Omni VI is not just a pertty pahdnnah!

:)

de AA1IK (Lead by example, It is much easier)
(to pull a string than it is to push it.)
Ernie Gregoire ()
Canaan, NH. ()
(_____)

e-mail : GREGOIRE@VALLEY.NET
packet : AA1IK@WA1WOK.FN43FE.NH.USA

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: Monte Stark <ku7y@sage.dri.edu>
Subject: [1861] Re: Is this the right place?
Message-ID: <Pine.SUN.3.90.950719154758.10787B-100000@vortex>

Hmmmmmm,

QRP and FlyFishing.....I also do both. Is this a
common trait?

I also bow hunt. (And some handgun hunting).

Maybe we are just a bunch of folks that like doing things
the hard way!

73, Ron, dah, dah (I'm three times slower than Chuck)

.....KU7Y.....ARCI #8829.....Monte "Ron" Stark.....
...ku7y@sage.dri.edu.....Sun Valley, Nevada....
.....ARRL.....NorCal #330.....NRA LIFE.....

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: larry.jones@archives.com (Larry Jones)
Subject: [1827] RE: QRP vs DX
Message-ID: <29c.1705.8@archives.com>

Greetings Gang...

I read with interest KF2PH's little antidote about QRP vs DX. I
would like to throw out my pesos worth of comment.

Isn't the first order of business of ham radio that of making
contact with other hams in order to exchange information. I have

been a QRP fanatic since '83. Before that I had the big linear, tall tower and the rig with the most recent bells and whistles. Then I discovered QRP operation with its challenges and homebrew aspect.

But, the one thing that I haven't forgotten is that I still enjoy talking to other hams. I will first try to make contact with another station calling CQ using the low power setting on my IC-735 (3 wts), but if that doesn't snag him/her, I will jump to my max setting of 35 watts. I could use some other low setting (I have been using 10 watts), but the 35 watt setting just happens to be the top of my power pot. Using the 35 watts will usually get me the contact, but not always.

I do not think that using more than the prescribed 5 watts is a violation of the principle of low power operation. I still believe that one should use common sense in the situation. What are you into ham radio for in the first place? Operating QRP is just another aspect of the hobby. It is special to us because we like the challenge and we think that it is fun. As for myself, I have a lot of respect for those hams that have the desire to take the challenge of working strickly QRP or QRPp. But, I also respect those hams that take the plunge into a contest or a DX pileup with all of its chaos. Doing that for very long would drive me crazier than what I already am. Who else but someone whose attic light is a little dim would sit at a radio listing to static hiss waiting for a reported band opening on 2 Meter SSB? Been there, done that!

73/72 Larry n5osg

```
*****
*                      Larry Jones  N5OSG                      *
*      4028 Random Cr Garland Tx  75043-3250                  *
*      Email:  larry.jones@archives.com                        *
*                                                                *
*      NORTEX #1  QRP-ARCI #5538  G-QRP #2785                  *
*      NORCAL #481  MI QRP #1333  NE-QRP #236                  *
*****
```

Internet: larry.jones@archives.com (Larry Jones)

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: GREGOIRE@VALLEY.NET (ERNEST GREGOIRE)
Subject: [1845] Re: qrp+

Message-ID: <199507191812.0AA26358@dartvax.dartmouth.edu>

>Hi Ernie,
>I saw your note on the 80 meter W1AW on the QRP+ today. I live in northern
>Vermont near Burlington and when I have my 80 m dipole on my QRP+, the 80
>meter W1AW broadcast is everywhere on the radio. The s meter pegs on 3.581
>and just barely comes off of the peg with the 20 dB atten. The 20 dB cleans
>up the general overload. I was playing on 10 meters at the time and did not
>note how much of 80 was wiped out. The overload on 10 was not strong, just
>annoying. I will make more observations.
>Bob rbarry@vnet.ibm.com WB2CWA
>
>Hello Bob, nice to run into you here.

You have described perfectly, the W1AW effect of the QRP+ rig.
I hope that Bruce comes up with something before the 80 meter
band quiets down come the cold weather. It would be ashamed to
loose 80 m. whenever W1AW is broadcasting.

Keep in touch, maybe we can collectively provide a louder squeeking
wheel, qsl?

de AA1IK	(Lead by example, It is much easier)
	(to pull a string than it is to push it.)
Ernie Gregoire	()
Canaan, NH.	()
	(_____)

e-mail : GREGOIRE@VALLEY.NET
packet : AA1IK@WA1WOK.FN43FE.NH.USA

From qrp-l@lehigh.edu Wed Jul 19 19:06:00 1995
From: GREGOIRE@VALLEY.NET (ERNEST GREGOIRE)
Subject: [1836] Re: QRP+ and W1AW and harmonics
Message-ID: <199507191532.LAA27334@dartvax.dartmouth.edu>

>On Tue, 18 Jul 1995, ERNEST GREGOIRE wrote:
>
>> I have a QRP+ and I like it very much. It is my primary H.F. rig at the
>> moment. It does have some personality, though. I noticed a problem on
>> 3581.5 , The W1AW code practice frequency. The problem is when w1aw, or
>> any other station is using that particular frequency, it wipes out a large
>> portion of the 80 meter band. This is the only frequency that this happens
>> on.
>> I asked if there were any others that noticed this trouble, here on
>> the QRP-L news group, but I got no replies at all.

```

>
>Didn't realize u had asked the question, sorry, must have missed it.
>
>I live about 175 miles (as the crow flies) from Newington (W1AW). Don't
>have a problem with the station wiping out 80 meters. The problem I am
>experiencing is this: the rig picks up harmonics of a local AM (I think
>its stereo) broadcast station located at 1400 kHz. I get 2.800, 4.200,
>5.600, and 7.000 MHz. I also pick up their signal at 3.710MHz (Right on
>
>-73- de N3UVR qrp
>                #####
>                0(o o)0
>Take me to your leader.      (_|_)   Leader? What leader? We don't got
no
>                <(__)>   stinkin' leader!
>Chris Doherty                <%%/%%%/%>
>doherty@lydian.scranton.com
>*****
***<SNIP>
Hello Chris,

```

I'm waiting for a fix from Index. I would try the old bonding and grounding routine for the AM station trouble first.

Bond all ground rods together, and to the electrical source, as well as the incoming water line if it is metal.

A poor connection can cause lots of trouble.

Burce (at Index) knows what the problem is with the W1AW signal. It occurs only in radios that are put together, as opposed to a radio in a test fixture. So it is a coupling trouble of some sort and he seems to think that he can fix it. Probably with some kind of shielding.

It's worth a call Index, maybe he can suggest some other cause.

```

de AA1IK                ( Lead by example, It is much easier      )
                        ( to pull a string than it is to push it.)
Ernie Gregoire          (                                          )
Canaan, NH.            (                                          )
                        (-----)

```

e-mail : GREGOIRE@VALLEY.NET
packet : AA1IK@WA1WOK.FN43FE.NH.USA

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: Steven Wilson <randyw@crl.com>
Subject: [1837] Re: QRP+ and W1AW and harmonics
Message-ID: <Pine.SUN.3.91.950719084030.22791B-100000@crl8.crl.com>

Install a parallel tuned circuit (1400 khz) in series with the receiver antenna lead , tune to kill BCI. I hv a 1590 station about 2 miles from me that over modulates. good luck de stan ak0b

On Wed, 19 Jul 1995, ERNEST GREGOIRE wrote:

> >On Tue, 18 Jul 1995, ERNEST GREGOIRE wrote:
> >
> >> I have a QRP+ and I like it very much. It is my primary H.F. rig at the
> >> moment. It does have some personality, though. I noticed a problem on
> >> 3581.5 , The W1AW code practice frequency. The problem is when w1aw, or
> >> any other station is using that particular frequency, it wipes out a large
> >> portion of the 80 meter band. This is the only frequency that this happens
> >> on.
> >> I asked if there were any others that noticed this trouble, here on
> >> the QRP-L news group, but I got no replies at all.
> >
> >Didn't realize u had asked the question, sorry, must have missed it.
> >
> >>I live about 175 miles (as the crow flies) from Newington (W1AW). Don't
> >>have a problem with the station wiping out 80 meters. The problem I am
> >>experiencing is this: the rig picks up harmonics of a local AM (I think
> >>its stereo) broadcast station located at 1400 kHz. I get 2.800, 4.200,
> >>5.600, and 7.000 mHz. I also pick up their signal at 3.710mHz (Right on
> >
> >>-73- de N3UVR qrp
> > #####
> > 0(o o)0
> >Take me to your leader. (_|_) Leader? What leader? We don't got
> no
> > <(___)> stinkin' leader!
> >Chris Doherty <%%%%%%>
> >doherty@lydian.scranton.com
> >*****
> ***<SNIP>
> Hello Chris,
>
> I'm waiting for a fix from Index. I would try the old bonding and
> grounding routine for the AM station trouble first.
>
> Bond all ground rods together, and to the electrical source, as
> well as the incoming water line if it is metal.

>
> A poor connection can cause lots of trouble.
>
> Burce (at Index) knows what the problem is with the W1AW signal.
> It occurs only in radios that are put together,as opposed to a
> radio in a test fixture. So is is a coupling trouble of some sort
> and he seems to think that he can fix it. Probably with some
> kind of shielding.
>
> It's worth a call Index,maybe he can suggest some other cause.
> de AA1IK (Lead by example, It is much easier)
> (to pull a string than it is to push it.)
> Ernie Gregoire ()
> Canaan, NH. ()
> ()
>
> e-mail : GREGOIRE@VALLEY.NET
> packet : AA1IK@WA1WOK.FN43FE.NH.USA
>
>
>

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: AE4KN@aol.com
Subject: [1859] Re: RE: QRP vs DX
Message-ID: <950719174452_36316212@aol.com>

I don't think there's anything to feel guilty about if you crank up the power when necessary. To me, low power is just like thje FCC definition: 'only enough for reliable communications'. If you need more to make contact, so be it, that's low compared to the people who just leave the linear on.

73's d AE4KN

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: Jim.Nestor@ey.com
Subject: [1831] Re: Rockloop antenna and SWL 30 power ou
Message-ID: <0014500001417183000002*@MHS>

Jeff,

Sounds interesting, especially the parts about breaking down for transport and being CHEEP! A drawing would be great! Thanks,

Jim, WK8G
jim.nestor@ey.com

From: usinet(qrp1)
Subject: Re: Rockloop antenna and SWL 30 power ou
From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: w9sz@prairienet.org (Zack Widup)
Subject: [1832] Re: Rockloop antenna and SWL 30 power ou
Message-ID: <9507191351.AA16536@prairienet.org>

>
>
>
>The Rock Loop is a tuned loop antenna that uses #12 wire in a square
>configuration. On one side of the square is a 100 pf air variable across an
>insulator. On the other side of the square is a balun made from a t50-2
>toroid. The primary side of the "xformer" goes to the coax feedline, one
>side
>to center and the other side to ground. The primary is wound with 20 turns
>of
>#22 enameled wire. The secondary is 5 turns of #22 and one side of the
>secondary goes to the one side of the insulator and the other side to the
>other. The antenna is split in half at each insulator. Near the coax
>feedpoint and balun, across about a 2 inch span on the loop wire, you solder
>a mini christmas tree bulb. To tune the antenna, you feed the antenna with
>about 2 watts at the desired frequency and adjust the cap for maximum
>brightness on the bulb!
>
>
>Jess NOTFI
>

Do you leave the bulb in the circuit all the time? The only drawback I
see to that is that you're throwing away a lot of that valuable QRP power
as heat/light! QRPers need to radiate as much as they can.

Maybe the bulb can be done away with and a little loose-coupled meter can
be used to tune it.

Please post the drawing. Sounds like fun!

Zack W9SZ

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: "Charles A. Rubenstein" <rubenc@iglou.com>
Subject: [1833] Re: Rockloop antenna and SWL 30 power ou
Message-ID: <Pine.SOL.3.91.950719095856.3658A-100000@iglou.iglou.com>

On Wed, 19 Jul 1995 Jim.Nestor@ey.com wrote:

>
> Jeff,
>
> Sounds interesting, especially the parts about breaking down for transport
> and being CHEEP! A drawing would be great! Thanks,
>
> Jim, WK8G
> jim.nestor@ey.com
> -----
> From: usinet(qrpl)
> To: NESTOJI; Multiple recipients of list
> Subject: Re: Rockloop antenna and SWL 30 power ou
> Date: Tuesday, July 18, 1995 7:30PM
>
> The Rock Loop is a tuned loop antenna that uses #12 wire in a square
> configuration. On one side of the square is a 100 pf air variable across an
> insulator. On the other side of the square is a balun made from a t50-2
> toroid. The primary side of the "xformer" goes to the coax feedline, one
> side
> to center and the other side to ground. The primary is wound with 20 turns
> of
> #22 enameled wire. The secondary is 5 turns of #22 and one side of the
> secondary goes to the one side of the insulator and the other side to the
> other. The antenna is split in half at each insulator. Near the coax
> feedpoint and balun, across about a 2 inch span on the loop wire, you solder
> a mini christmas tree bulb. To tune the antenna, you feed the antenna with
> about 2 watts at the desired frequency and adjust the cap for maximum
> brightness on the bulb!
>
> I will try to work up a drawing of the antenna if there is enough interest
> generated, and also include the issue information of the Five Watter that
> the
> antenna is in.
>
> I am planning on enclosing the bulb/balun side in a small enclosure, the cap
> side in a small enclosure, then using small diameter PVC tubing using a 4
> way tee in the center to make the loop supports out of. That way I can make
> the wire loop "disconnectable" from the supports and break the supports down
> into 2 foot sections for transport.
>

> If anyone wants the drawing or more specifics, let me know. Will be a good
> antenna for traveling and motels and such, as it should tune 15-30 meters
> and
> is CHEEP!
>
> Jess NOTFI
>
>
>

Jess, a drawing with dimensions would be real nice. This could be a neat
project ant.

Charlie KB8BWE
72

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: geoffs@onr.com (Geoff Schecht)
Subject: [1840] Re: Rockloop antenna and SWL 30 power ou
Message-ID: <199507191648.LAA10135@Sierra.onr.com>

>> If anyone wants the drawing or more specifics, let me know. Will be a good
>> antenna for traveling and motels and such, as it should tune 15-30 meters
>> and
>> is CHEEP!
>>

Draft Away! I can read almost any drawing format except Postscript.
I'd like to see a good drawing of a Rockloop. I'm having problems
envisioning it with a verbal description.

Gooff NQ7A

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: JCoote@aol.com
Subject: [1825] Re: Rockloop antenna and SWL 30 power out.
Message-ID: <950718211717_35671093@aol.com>

Be careful about toroids. There is no standard for color-coding them. The
toroid you mention sounds like Amidon, so you should buy from them.

Now that I think of it, isn't the toroid in the Rockloop is a broadband step
down transformer and not a tuned circuit like in a PA or receiver front end?

If that's the case you may be able to get away with other toroids, even
ferrites. Other electrically small loops use different matching methods,

but the impedance in a small loop is very low at the feedpoint.

72, Jay

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: Mike Thomas <MTHOMAS@UGA.CC.UGA.EDU>
Subject: [1835] Re: Transistors with BC Prefix
Message-ID: <950719.111305.EDT.MTHOMAS@UGA.CC.UGA.EDU>

On Wed, 19 Jul 1995 10:59:31 EDT "James P. Rybak" said:

>Can anyone tell me who in the U.S. distributes transistors with a BC
>prefix. Specifically, I want to obtain the BC109 and BC477 transistors.
>Just out of curiosity, who is the manufacturer?

>

>Thanks for any help you can provide.

>

>

>Jim Rybak W0KSD

>

Jim and all,

Try Newark they have the BC109 listed in their mammoth 95 tome. They list the manufacture as Phillips.

Mike Thomas

University Computing & Networking Services
University of Georgia

From qrp-1@lehigh.edu Wed Jul 19 19:06:00 1995
From: GREGOIRE@VALLEY.NET (ERNEST GREGOIRE)
Subject: [1854] Re: YAFFOTA!
Message-ID: <199507192044.QAA29646@dartvax.dartmouth.edu>

><snip>

>YAFFOTA! - Yet Another Forty-Forty On The Air!

>

>

>73, Gary N2JGU

>gmd@rfc.comm.harris.com

Congradulatons Gary,

I have a 40/40 that is installed in a Ten Tec box and has a built in
keyer from A.& A. engineering, and a frequency counter for a display too.
I'd like to build another one but smaller for back packing.

de AA1IK	(Lead by example, It is much easier)
	(to pull a string than it is to push it.)
Ernie Gregoire	()
Canaan, NH.	()
	(_____)

e-mail : GREGOIRE@VALLEY.NET
packet : AA1IK@WA1WOK.FN43FE.NH.USA